

Amendments to the Claims

Please cancel Claims 3 and 4.

Please amend Claims 1, 5, 7-8 and 20.

Please add Claims 23-33.

The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1. (Currently Amended) A method of ~~treating a TNF α mediated inhibiting TNF α in a human patient, wherein said human patient has a neoplastic disease in a human~~ comprising administering to the human patient an effective TNF α -inhibiting amount of an anti-TNF α antibody or antigen-binding fragment thereof, said antibody comprising a human constant region, wherein said anti-TNF α antibody or antigen-binding fragment thereof (i) competitively inhibits binding of ~~human TNF α to anti-TNF α chimeric monoclonal antibody cA2 which comprises the variable region of monoclonal antibody A2 (ATCC Accession No. PTA-7045)~~ to human TNF α and (ii) binds to a neutralizing epitope of human TNF α *in vivo* with an affinity of at least 1×10^8 liter/mole, measured as an association constant (Ka), as determined by Scatchard analysis.

Claims 2.-4. (Canceled).

5. (Currently Amended) A method of ~~treating a TNF α mediated inhibiting TNF α in a human patient, wherein said human patient has a neoplastic disease in a human~~ comprising administering to the human patient an effective TNF α -inhibiting amount of an anti-TNF α antibody or antigen-binding fragment thereof, wherein said anti-TNF α antibody comprises a human IgG1 constant region and wherein said anti-TNF α antibody or antigen-binding fragment thereof (i) competitively inhibits binding of ~~human TNF α to anti-TNF α chimeric monoclonal antibody cA2 which comprises the variable region of monoclonal antibody A2 (ATCC Accession No. PTA-7045)~~ to human TNF α and (ii) binds to a neutralizing epitope of human TNF α *in vivo* with an affinity of at least 1

$\times 10^8$ liter/mole, measured as an association constant (Ka), as determined by Scatchard analysis.

6. (Canceled)
7. (Currently Amended) A method of ~~treating a TNF α mediated~~ inhibiting TNF α in a human patient, wherein said human patient has a neoplastic disease in a human comprising administering to the human patient an effective TNF α -inhibiting amount of an anti-TNF α chimeric antibody, wherein said anti-TNF α chimeric antibody comprises a non-human variable region comprising an amino acid sequence selected from the group consisting of SEQ ID NO.:3 and SEQ ID NO.:5.
8. (Currently Amended) A method of ~~treating a TNF α mediated~~ inhibiting TNF α in a human patient, wherein said human patient has a neoplastic disease in a human comprising administering to the human patient an effective TNF α -inhibiting amount of an anti-TNF α chimeric antibody, wherein said anti-TNF α chimeric antibody comprises a non-human variable region comprising an amino acid sequence selected from the group consisting of SEQ ID NO.:3 and SEQ ID NO.:5 and an IgG1 human constant region.
9. (Original) The method of Claim 7 wherein the non human variable region comprises a polypeptide encoded by a nucleic acid sequence selected from the group consisting of SEQ ID NO.:2 and SEQ ID NO.:4.
10. (Original) The method of Claim 8 wherein the non human variable region comprises a polypeptide encoded by a nucleic acid sequence selected from the group consisting of SEQ ID NO.:2 and SEQ ID NO.: 4.
11. (Canceled).

12. (Previously Presented) The method of Claim 1 wherein said anti-TNF α antibody is a humanized antibody.
13. (Previously Presented) The method of Claim 1 wherein said anti-TNF α antibody is a human antibody.
14. (Previously Presented) The method of Claim 1 wherein said anti-TNF α antibody is a chimeric antibody.
15. (Canceled).
16. (Previously Presented) The method of Claim 1 wherein said anti-TNF α antibody is administered to the human by means of parenteral administration.
17. (Previously Presented) The method of Claim 1 wherein said anti-TNF α antibody is administered to the human by means of intravenous administration, subcutaneous administration or intramuscular administration.
18. (Canceled).
19. (Previously Presented) The method of Claim 1 wherein said TNF α -inhibiting amount of said anti-TNF α antibody comprises a single or divided dose of about 0.1 - 50 mg/kg.
20. (Currently Amended) The method of Claim 19 wherein the single or divided dose is one selected from the group consisting of: ~~about a 0.1 - 1 mg/kg dose, about a 1.0 - 5 mg/kg dose, about a 5 - 10 mg/kg dose and about a 10 - 20 mg/kg dose~~ 0.5, 0.9, 1, 1.1, 1.5, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 or 15 mg/kg per day on at least one of day 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 or 30 or at least one of week 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 or 20.

21. (Canceled).
22. (Previously Presented) The method of Claim 1, wherein said fragment is selected from the group consisting of Fab, Fab', F(ab')₂ and Fv.
23. (New) The method of Claim 1, wherein said antibody or antigen-binding fragment comprises a human constant region and a human variable region.
24. (New) The method of Claim 1, wherein said antibody or antigen-binding fragment comprises at least one human light chain and at least one human heavy chain.
25. (New) The method of Claim 24, wherein the light chain comprises all antigen-binding regions of the light chain of A2 (ATCC Accession No. PTA-7045).
26. (New) The method of Claim 24, wherein the heavy chain comprises all antigen-binding regions of the heavy chain of A2 (ATCC Accession No. PTA-7045).
27. (New) The method of Claim 24, wherein the light chain comprises all antigen-binding regions of the light chain of A2 (ATCC Accession No. PTA-7045) and the heavy chain comprises all antigen-binding regions of the heavy chain of A2 (ATCC Accession No. PTA-7045).
28. (New) A method of inhibiting TNF α in a human patient, wherein said human patient has a neoplastic disease, comprising administering to the human patient an anti-TNF α antibody or antigen-binding fragment thereof, said antibody comprising a human constant region, wherein said antibody or antigen-binding fragment (i) comprises the antigen-binding regions of A2 (ATCC Accession No. PTA-7045), and (ii) binds to a neutralizing epitope of human TNF α with an affinity of at least 1×10^8 liter/mole, measured as an association constant (K_a), as determined by Scatchard analysis.

29. (New) The method of Claim 1, further comprising administering a composition comprising the antibody or antigen-binding fragment of Claim 1 and a pharmaceutically acceptable carrier.
30. (New) The method of Claim 1, wherein said antibody or antigen-binding fragment has specificity for a neutralizing epitope of human TNF α .
31. (New) The antibody or antigen-binding fragment of Claim 1, wherein said Scatchard analysis comprises labeling the anti-TNF α antibody or antigen-binding fragment thereof and measuring direct binding of ^{125}I labeled anti-TNF α antibody or antigen-binding fragment thereof to immobilized rhTNF α , and wherein said antibodies are labelled to a specific activity of about 9.7 $\mu\text{Ci}/\mu\text{g}$ by the iodogen method.
32. (New) A method of treating fistulas in Crohn's disease in a human in need thereof, comprising administering to the human at least one single or divided 0.5 - 50 mg/kg dose of an anti-TNF α antibody or antigen-binding fragment thereof, said antibody comprising a human constant region, wherein said anti-TNF α antibody or antigen-binding fragment (i) competitively inhibits binding of A2 (ATCC Accession No. PTA-7045) to human TNF- α , and (ii) binds to a neutralizing epitope of human TNF- α with an affinity of at least 1×10^8 liter/mole, measured as an association constant (Ka), as determined by Scatchard analysis.
33. (New) The method of Claim 32, wherein said single or divided dose is 1 - 10 mg/kg.